NMFS Biological Opinion, 20 May 2002 Page 91-92 12.5 Terms and Conditions

Term and Condition 2a

- 2. In order to minimize the likelihood of incidental take associated with short-term (direct and indirect) impacts to listed salmonids during Project construction and maintenance activities, the Corps shall do the following:
 - a. Minimize effects from entrainment through the following actions:
 - i. Implement the dredging Impact Minimization Measures and Best Management Practices as identified in Chapter 3 of the 2001 BA.
 - ii. Monitor operation of the dredge draghead and/or cutterhead to minimize the time they are removed from the substrate.

Action Plan

Hopper- The dredge orders for the Corps dredges *Essayons* and *Yaquina* have the following statement:

"As a result of the Section 7 Consultation (required by the Endangered Species Act) for the Columbia River and Side Channels Maintenance Dredging, the National Marine Fisheries Service issued a Biological Opinion covering this maintenance dredging. One of the conditions for hydraulic dredging in general is that the in-take (drag-head) be at or below the surface of the material being removed. The in-take may only be raised a maximum of three (3) feet above the surface of the bed for brief periods of purging or flushing the system or for turning, if the pumps are running."

Contract hopper dredges have a similar statement and will be required to submit an implementation plan. This plan will be provided to NOAA Fisheries and the U.S. Fish and wildlife service for review.

Mechanical- Compliance plans will be required by the dredging contractors. These plans will be submitted to the Agencies and U.S. Fish and Wildlife service for review. All in-water dredging for channel work will be done during the construction period. Berth deepening and maintenance will be done by the Ports and they will coordinate the contractor plans with NOAA Fisheries and the U.S. Fish and Wildlife Service. It is anticipated that this work will be done during the Nov.1 to Feb. 28 in water work period.

Pipeline- A statement similar to the above will be included in the contract for pipeline dredging. The contractor will be required to submit an implementation plan and this plan will be submitted to NOAA Fisheries and U.S. Fish and Wildlife for review.

Drilling and Blasting- See implementation plan for Term and condition 2b.

Term and Condition 2a

Schedule: Existing contract compliance plans will be provided to NOAA Fisheries and U.S. Fish and Wildlife for review to determine their acceptability for the Channel Improvement Project construction contracts. These will be provided to the agencies by April 15 2003.

Compliance plans in the construction contracts will be developed by the COE, for inclusion in the contracts based on comments on the above plans and submitted to NOAA Fisheries and U.S. Fish and Wildlife for review prior to beginning construction to assure the agreed upon language is included.

- Hopper language provided to NOAA and USFWS on April 8, 2003
- NOAA and USFWS feedback on contract language May 23, 2003
- Pipeline language to be provided 1 April 2003

Table 3-3: Best Management Practices for Disposal

Measure	Justification	Duration	Management Decision
Flowlane Disposal			
Dispose of material in a manner that prevents mounding of the disposal material.	Spreading the material out will reduce the depth of the material on the bottom, which will reduce the impacts to fish and invertebrate populations.	Life of contract or action.	Maintain until new information becomes available that would warrant change.
Maintain discharge pipe of pipeline dredge at or below 20 feet of water depth during disposal.	This measure reduces the impact of disposal and increased suspended sediment and turbidity on migration juvenile salmonids, since they are believed to migrate principally in the upper 20 feet of the water column.	operations.	Maintain until new information becomes available that would warrant change.
Upland Disposal			
Berm upland disposal sites to maximize the settling of fines in the runoff water.	This action reduces the potential for increasing suspended sediments and turbidity in the runoff water.	Continuous during disposal operations.	Maintain until new information becomes available that would warrant change.
Maintain 300-foot habitat buffer.	This action maintains important habitat functions.	Life of contract or action.	Maintain until new information becomes available that would warrant a change.
Shoreline Disposal			
Disposal of material in shoreline areas will be done concurrently with the dredging operation. Timing restrictions will be based on the dredging operation not the shoreline disposal operation.	erosive and do not provide much if any juvenile salmon habitat, consequently it is not necessary to limit disposal to the inwater work	Continuous during dredging and disposal operations.	Maintain until new information becomes available that would warrant change.
Grade disposal site to a slope of 10 to 15 percent, with no swales, to reduce the possibility of stranding of juvenile salmonids.	conditions on the beach that will	Continuous during dredging and disposal operations.	Maintain until new information becomes available that would warrant change.
Ocean Disposal			
Disposal of material in accordance with the site management and monitoring plan, which calls for a point dump placement of any construction material. The plan is to place any construction material in the southwest corner of the deep water site.	This action minimizes conflicts with users and impacts to ocean resources.	Continuous during dredging operations.	Maintain until new information becomes available that would warrant change.
General Provisions for All Disposal			
Disposal of hazardous waste.	The contractor, where possible, will use or propose for use materials that may be considered environmentally friendly in that waste from such materials is not regulated as a hazardous waste or is not considered harmful to the environment. If hazardous wastes are generated, disposal of this material shall be done in accordance with 40 CFR parts 260-272 and 49 CFR parts 100-177.	Life of contract or action.	If material is released, it shall be immediately removed and the area restored to a condition approximating the adjacent undisturbed area. Contaminated ground shall be excavated and removed and the area restored as directed. Any in-water discharge shall be immediately reported to the nearest U.S. Coast Guard Unit for appropriate response.